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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/598,105	06/21/2000	Bradley M. Abrams	MS154749.1/40062.75-US-01	7343

23552 7590 05/23/2003

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EXAMINER

SNYDER, DAVID A

ART UNIT	PAPER NUMBER
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2122

DATE MAILED: 05/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/598,105

Applicant(s)

ABRAMS ET AL.

Examiner

David A Snyder

Art Unit

2122

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 March 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☒ Other: See Continuation Sheet.

Continuation of Attachment(s) 6). Other:

Manual page of:

gcc (<http://www.freebsd.org/cgi/man.cgi?query=gcc&apropos=0&sektion=0&manpath=FreeBSD+4.8-RELEASE&format=html>);

ar (<http://www.freebsd.org/cgi/man.cgi?query=ar&apropos=0&sektion=0&manpath=FreeBSD+4.8-RELEASE&format=html>)

Standard output of command, 'ar':

contents of '/usr/lib/libbz2.a',
print out of files in '/usr/lib/libbz2.a'.

DETAILED ACTION***Drawings***

1. The corrected or substitute drawings were received on 21 Mar 2003. These drawings are acceptable.

Response to Arguments

2. The amendments to the claims 12 and 16 are acceptable. The rejections under 35 U.S.C. 101 are withdrawn.
3. Applicant's arguments filed 21 Mar 2003 have been fully considered but they are not persuasive.

The Applicant's arguments, in regard to the rejection of claims 2 – 6 and 10 – 24 under 35 U.S.C. 112, first paragraph, are unpersuasive. The Applicant gives a total of five lines regarding the “consuming” of common language files (pg. 24, col. 7 – 11). Numerous instances and examples are given for the incorporation of a common language file library, however, the generic term, “common language file,” can be reasonably interpreted as incorporating libraries and executable files in a common language format. One example, among many, is the BSD/Linux **gcc** use of libraries. Libraries, created with the BSD/Linux command **ar**, reveals files compiled into a “common language” format. The “common language” files are object files – as shown by the ‘.o’ extensions. These libraries (or archives) of “common language” files contain the symbol data necessary in order to incorporate the library, at compile time or run-time, with the program under compilation. This interpretation is illustrated in the manpages for **gcc**, **ar**, an archive listing of the archive library of **libbz2.a**, and a listing of the contents of

libbz2.a. However, one of reasonable skill in the art would be unable to reproduce the “consumption” or “re-compilation” of all common language format files without undue experimentation. Therefore, the 35 U.S.C. 112, first paragraph, is **maintained**.

The Applicant’s arguments, in regards to the rejection of claim 7 under 35 U.S.C. 102, are unpersuasive. The Applicant states that the reference Blickstein (USPN 5,577,253) does not “identically” disclose matter of the “amended” claim 7. However, the Examiner did not apply Blickstein to an amended claim 7, but to the original claim 7. That being the case, Blickstein does disclose a “common language instructions section having instruction in a common language . . . related to the written program functions of the native source file and consumed metadata” (Blickstein, col. 10, ll. 35 – 39).

The Applicant’s arguments, in regards to the rejection of claim 12 under 35 U.S.C. 102, are unpersuasive. The Applicant contends that Blickstein does not “identically disclose an executable instructions section that is suitable for use with a plurality of source languages.” However, the language of claim 12 is a description of the output of a front-end compiler. With this in mind, the Examiner would point the Applicant to Blickstein’s, “This intermediate language is constructed to represent any of the source code languages in a universal manner” (Blickstein, col. 3, ll. 12 – 17). Contrary to the Applicant’s assertion, the output format of Blickstein is ‘identical’ to that of the Applicant’s.

Therefore, the rejections of claims 7 and 12, and the dependent claims 8 – 11 and 13 – 15 are **maintained**.

4. The rejections, which follow, are in response to Applicant’s original claims 1 – 24.

Art Unit: 2122

a. Claims 2 – 6, 10 – 24 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. One of ordinary skill in the art would have been unable to reproduce or replicate the process engendered in consuming or compiling a ‘common language file’ or ‘common language library,’ as produced by another front-end compiler as set forth in the specification or claims. The process or processes of consuming or re-compiling a ‘common language file’ or ‘library’ in conjunction with a native source code file can be pursued in two different and opposing directions:

- i. The common language file or library metadata and executable code is separated from the included/imported common language file or library and incorporated into the new second common language file which is produced from a second native source code file; or
- ii. The common language file or library metadata is incorporated into the second-compiled common language file, as produced by the compilation of the second native source code file, by means of reference to the data members and function/methods of the first-compiled common language file or library but without incorporating the executable code of the first-compiled common language file or library into the second-compiled common language file. By this means, at runtime, the second-compiled common language file loads into memory the first-compiled common language file or library and references the data members and

methods/functions of the first-compiled common language file external to the internal operation of the second-compiled common language file.

- b. As regards figure 2 in light of these two interpretations of the ‘compiling’ or ‘consuming’ of a first-compiled common language file at the time of the compilation of a second native source code file, the figure may be incomplete or incorrect. With the first interpretation of the first-compiled common language file being re-compiled or consumed, the drawing of figure 2 is correct. However, with the second interpretation of the first-compiled common language file being re-compiled or consumed, the drawing of figure 2 is incomplete. At runtime, the second-compiled common language file would be loaded into the execution environment, the first-compiled common language file would be required and loaded into the execution environment memory, and the second-compiled common language file would commence operation and reference the first-compiled common language file data members and methods/functions. If the second interpretation of the above listed claims is correct, then the applicant is required to submit a proposed drawing correction in reply to this Office action. However, formal correction of the noted defect may be deferred until after the examiner has considered the proposed drawing correction. Failure to timely submit the proposed drawing correction will result in the abandonment of the application.
- c. Claims 1, 7 – 9, and 12 – 15 rejected under 35 U.S.C. 102(b) as being anticipated by Blickstein (USPN 5,577,253).

As per claim 1, Blickstein teaches/discloses a “metadata module that compiles information to produce metadata information” (Blickstein, “create[s] the internal representation of the module”, col. 11, lines 15 – 17);

Blickstein also teaches/discloses a “code module that compiles information to produces [sic] executable instructions.” (Blickstein, “translate the source text in file 21 to a language-independent internal representation”, col. 6, lines 26 –35).

As per claim 7, Blickstein teaches/discloses a “common language instructions . . . relat[ing] to the written program functions of the native source” (Blickstein, “generates from them an intermediate language representation of the program expressed in the source code”, col. 3, lines 10 – 17).

As per claim 8, as applied to claim 7 above, Blickstein teaches/discloses the “common language is a common intermediate language” (Blickstein, “constructed to represent . . . source code languages in a [sic] universal manner, so the interface between the front end and the back end is of a standard format”, col. 3, lines 12 – 17).

As per claim 9, as applied to claim 7 above, Blickstein teaches/discloses the “native source language is one of: a procedural language, an object oriented language, and a functional language.” (Blickstein, “A front end is tailored for each different source language, such as Cobol, Fortran,”, col. 3, lines 8 –9).

As per claim 12, the interpretation given to this and its dependent claims is that of claim 8 – that a common language file is an intermediate file as produced

Art Unit: 2122

by a front-end. Therefore, Blickstein teaches/discloses the multi-language front-end compiler outputting a “metadata section” (Blickstein, “generate symbol table and the intermediate language graphs”, col. 11, lines 44 – 50);

Blickstein also teaches/discloses the multi-language front-end compiler outputting an “executable instructions section” (Blickstein, “produce an assembly code listing of the compiled module”, col. 12, lines 20 – 22).

As per claims 13 – 15, as applied to claim 12 above, Blickstein teaches/discloses the front-end compiler compiling “procedural”, “functional”, and “object-oriented” programming languages (Blickstein, col. 3, lines 8 – 9).

Conclusion

2. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 2122

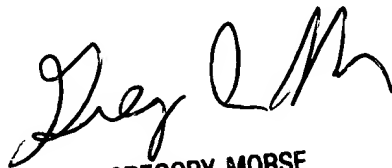
Any inquiry concerning this communication or earlier communications from the examiner should be directed to David A Snyder whose telephone number is (703) 305-7205.

The examiner can normally be reached on Monday - Friday from 9am - 5pm Eastern Time.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Greg A Morse can be reached on (703) 308-4789. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 746-7239 for regular communications and (703) 746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.

dAs
May 17, 2003


GREGORY MORSE
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2100